#### THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte WALDEMAR WEINBERG and HERWIG SCHEIDLER

Appeal No. 1997-1685 Application 08 /348,236

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ON BRIEF

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Before DOWNEY, WILLIAM F. SMITH, and LORIN, <u>Administrative Patent Judges</u>. DOWNEY, <u>Administrative Patent Judge</u>.

#### **DECISION ON APPEAL**

This is an appeal under 35 U.S.C. §134 from the final rejection of claims 11-17, 19-24, all the claims pending in the application.

The subject matter on appeal is directed to a glass or glass ceramic substrate having applied thereto a ceramic color layer comprising a pigment, glass and

mica flakes. The addition of the mica flakes to the color layer is said to eliminate tear and crack formation of the cooled layered body (page 7a, lines 1-7 of the specification).

Claims 11<sup>1</sup> and 21 are illustrative and reads as follows:

11. A colored substrate composition comprising:

a glass or glass ceramic substrate, and at least one decorative ceramic color layer applied thereto,

wherein said ceramic color layer comprises at least one pigment, at least one glass and a chemically inert, elastic inorganic substance and said elastic inorganic substance consists of mica flakes in an amount of 1-20 wt.%.

### 21. A color substrate composition comprising:

a glass or a glass ceramic substrate and at least one decorative ceramic color layer applied thereto,

wherein said ceramic color layer comprises at least one pigment, at least one glass and uncoated mica flakes, said uncoated mica flakes being present in said ceramic color layer in an amount of 1-20 wt.%.

The references relied upon by the examiner are:

Diefenbach et al. (Diefenbach) 5,032,429 July 16, 1991

The examiner's answer contained two new grounds of rejection against claims 11-17 and 19-24 under 35 U.S.C. § 112, second paragraph. The examiner considered the language "ceramic color layer" to lack antecedent bases in claim 11 and that the language "optically inactive" as indefinite. In response thereto, applicants amended claim 11, lines 2-3 to recite "at least one decorative ceramic color layer" and amended claim 11, lines 5-6 to delete the expression "optically inactive". Applicants additionally pointed out that claims 12-17 and 19-24, also subject to the new grounds of rejection, did not contain the language "optically inactive" Upon consideration of the amendment, the examiner indicated that the amendment would be entered and that the new grounds of rejection were withdrawn. Accordingly, claim 11, as presented in this decision, includes the aforementioned amendments.

Yamazaki, et al. (Yamazaki) (Japanese Application)

58-45137

Mar. 16, 1983

Claims 12-17 and 19-24 stand rejected under 35 U.S.C. § 112, first paragraph. Claims 11-17 and 19-24 stand rejected under 35 U.S.C. § 103 as unpatentable over Yamazaki or Diefenbach.

After careful consideration of the arguments of applicants and the examiner and of the record before us, we find ourselves in agreement with applicants. Accordingly, we reverse.

## 35 U.S.C. § 112

U.S.C. § 112, first paragraph because the specification as originally filed does not support the use of the expression "uncoated mica flakes", an expression that was added by amendment June 16, 1995 to claim 21.<sup>2</sup>

The question of whether the descriptive requirement under 35 U.S.C. § 112, first paragraph is met, is a question of fact. <u>Vas-Cath Inc.</u>, 935 F.2d at 1561, 19 USPQ2d, at 1116. Whether a description meets the requirement of 35 U.S.C. § 112 must be decided on a case-by-case basis. <u>In re Wilder</u>, 736 F.2d 1516, 1520, 222 USPQ

<sup>&</sup>lt;sup>2</sup> The description requirement comes into play where claims not presented in the application when filed are presented thereafter. <u>Vas-Cath, Inc v. Mahurkar</u>, 935 F.2d 1555, 1560, 19 USPQ2d 1111, 1114 (Fed. Cir. 1991).

369, 372 (Fed. Cir. 1984), <u>cert. denied</u>, 469 U.S. 1209 (1985) and <u>In re Smith</u>, 548 F.2d 1389, 1395, 173 USPQ 679, 683 (CCPA 1972).

The examiner states that "[N]owhere in the original disclosure is the use of uncoated mica described." However, it is not necessary the claimed subject matter be supported by the specification in <u>ipsis verbis</u>. <u>In re Wertheim</u>, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976); <u>In re Lukach</u>, 442 F.2d 967, 969, 169 USPQ 795, 796 (CCPA 1971). Rather, the first paragraph of § 112 requires that the specification reasonably convey to persons skilled in the art that the applicants invented the full scope of the subject matter claimed at the time the application was filed. <u>Vas-Cath Inc.</u>, 935 F.2d at 1563-64, 19 USPQ2d at 1117.

Here applicants, in their specification in the paragraph bridging pages 7a and 7b, indicate that commercially available raw materials such as Muscovite, Biotite, Phlogopite, Zinnwaldit, Paragonit, as well as the family of hydro mica and brittle mica are useful in their invention<sup>3</sup>. It is our view that the recitation by applicants of the use of raw materials, i.e., natural and synthetic forms of mica, provides the necessary

<sup>&</sup>lt;sup>3</sup> <u>See Kirk-Othmer</u>, Micas, Natural and Synthetic, page 416 identifying some of the natural and synthetic micas and indicating that these materials are constructed of extremely thin cleavage flakes and are characterized by, <u>inter alia</u>, a high degree of flexibility and elasticity.

description for one of ordinary skill in the art to recognize that the specification, as originally filed, provides a basis for the concept of "uncoated mica flakes".

The examiner is not persuaded that the description of Muscovite describes uncoated mica because Diefenbach identifies Muscovite as a natural mica that provides interference colors. We are not persuaded by the examiner's position for the examiner has not provided any evidence to establish that natural or synthetic mica is coated.

35 U.S.C. § 103

Claims 11-17 and 19-24 are rejected as unpatentable over Yamazaki and Diefenbach.

Turning first to claims 12-17 and 19-24, the examiner deems the rejections

proper because he gave no weight to the expression "uncoated mica flakes". The rejection is not sustainable because the examiner has improperly ignored an express limitation in these claims. All limitations of a claim must be considered regardless of whether or not they were supported by the specification as filed. Ex parte Grasselli, 231 USPQ 393, 394 (Bd. Pat. App. 1983), citing In re Wilson, 424 F.2d 1382, 1385, 156 USPQ 494, 496 (CCPA 1970) and In re Miller, 441 F.2d 689, 692, 169 USPQ 597, 599 (CCPA 1971).

Turning next to claim 11, claim 11 recites a colored substrate composition comprising a glass or glass ceramic substrate having at least one decorative ceramic color layer applied thereto. The decorative ceramic color layer comprises at least three ingredients: (1) at least one pigment, (2) at least one glass and (3) from 1-20 wt.% of a chemically inert, elastic inorganic substance. The chemically inert, elastic inorganic substance consists of mica flakes.

Yamazaki describes a glass or ceramic substrate having coated thereon a composition comprising an inorganic pigment, glass powder and 10-25 wt.% of a pearl luster pigment, that is, mica coated with titania or iron oxide. Yamazaki differs from claim 11 in his use of coated mica.

Diefenbach describes a glass or ceramic substrate having coated thereon a composition comprising (1) glass flux and (2) at least 10 wt. % mica platelets coated with titanium or iron oxide. The coated mica platelets are referred to as pigments; the color is provided by the color of the naturally occurring mineral itself or from the metal oxide coating. Diefenbach differs from claim 11 in the use of coated mica. He also does not teach the use of pigment in combination with the coated mica.

It is the examiner's position that the coated mica of Yamazaki and Diefenbach satisfies the claimed mica flakes of claim 11 because mica is inorganic and elastic. Applicants, on the other hand, urge that the language "a chemically inert, elastic inorganic substance and said elastic inorganic substance consists of mica flakes..."

excludes the coated mica of the prior art (emphasis added). While the examiner recognizes and accepts that the coatings of the mica are not elastic (Answer, page 10, paragraph 1), he maintains his position arguing that the coatings would not alter the molecular structure of the mica, rending them inelastic.

We are not persuaded by the examiner's argument because the examiner failed to provide any evidence in support of his argument. We also are not persuaded because the examiner failed to appreciate the meaning of the term "consists of" used to define applicants chemically inert, elastic inorganic substance. The term "consists of" or "consisting of" are terms of art in patent law. The presence of "consists of" in a composition claim closes the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith. Hence, the use of the term "consists of" in claim 11 limits or closes the claims to mica flakes except for impurities. Yamazaki and Diefenbach specifically teach the use of coated mica flakes. On this record, the examiner has failed to establish that the coating is an impurity and that the coating would not render the coated mica platelets inelastic.

The rejection of the claims over Diefenbach fails for an additional reason.

As noted earlier, claim 11 recites three ingredients and the examiner failed to explain how

<sup>&</sup>lt;sup>4</sup> <u>See Ex parte Davis</u>, 80 USPQ 448, 450 (Bd. App. 1948) where the terms "comprising", "consisting" and "consisting essentially of" were first "defined" in a published opinion.

Diefenbach's two component composition satisfies the claimed three component ceramic color layer of the color substrate composition.

# Reversed

MARY F. DOWNEY Administrative Patent Judge	) ) )
WILLIAM F. SMITH Administrative Patent Judge	) ) BOARD OF PATENT
	) ) APPEALS AND
	) INTERFERENCES
HUBERT C. LORIN ) Administrative Patent Judge	)

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